

Claims

1. A device for taking samples from a body, of the  
5 type comprising:
- a needle (4) whose distal end forms a recess  
able to receive said sample;
  - a cannula (5) coaxially surrounding said  
10 needle, said needle and cannula being able to  
slide relative to one another;
  - slides (11, 12) connected respectively to said  
needle and cannula;
  - springs (14, 15) connected respectively to said  
15 slides;
  - a grippable housing (2) of elongate shape,  
defining an inner seat (10) inside which are  
arranged in series, on a longitudinal axis of  
said housing, said slides (11, 12) which are  
20 able to slide between a forward position in the  
housing, for which said needle (4) and cannula  
(5) are in a rest position and ready to be  
primed for taking a sample, and a rearward  
position for which said needle and cannula are  
in a primed, retracted position ready for said  
25 sampling;
  - a control button (6) for bringing said slides  
to the rearward position counter to said  
respective springs;
  - means for blocking said slides (11, 12) in the  
30 rearward position; and
  - a trigger mechanism (8, 9) for canceling said  
blocking means and, under the action of said  
springs, causing the forward displacement of  
said slides and firing of said needle and  
35 cannula,
- wherein said slides (11, 12) comprise limit stops  
(16, 17) which are transversely offset with  
respect to one another, and said control button  
(6) comprises a lug (18) which can be moved

transversely under the action of displacement means and acts sequentially on said offset limit stops in order to bring said slides one after the other to the rearward position.

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2. The device as claimed in claim 1, wherein said displacement means comprise a spring (21) arranged transversely between said button (6) and said lug (18) and permitting the latter to pass from a retracted position, for which one (11) of said slides is displaced to the rearward position via its limit stop (16), to a deployed position for which the other slide (12) is displaced to the rearward position via its offset limit stop (17), and an inclined ramp (22) which is provided inside said housing and which returns said lug from its deployed position to its retracted position, upon return of said button to the initial position.

20 3. The device as claimed in claim 2, wherein said inclined ramp (22) terminates in a lateral end edge (22A) on which, in the initial position of said button, said lug (18) bears, compressing its spring, and which is situated at the same level as the limit stop (16) of the slide (11) to be displaced first.

30 4. The device as claimed in claim 1, wherein said lug (18) is connected to said button (6) by a slideway connection (20) and can slide transversely, via the latter, under the action of the displacement means.

35 5. The device as claimed in claim 1, wherein said slide (12) with cannula and its spring (15) are situated at the front of said housing (2) and are brought first to a rearward, primed position via said lug, while said slide (11) with needle and its spring (14) are situated coaxially at the rear

and are displaced second to the rearward, primed position, the displacement of said slides and springs being limited by brackets fixed to said housing.

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6. The device as claimed in claim 1, wherein said control button (6) is mounted so as to slide longitudinally through an oblong opening (7) of said housing, and wherein a spring (23) arranged  
10 longitudinally connects said housing to said button in order to return the latter spontaneously to its initial position, against the corresponding front edge of said opening.

15 7. The device as claimed in claim 1, wherein said blocking means comprise at least one bracket with elastically deformable hook (11B, 11C - 12B, 12C) issuing from each slide, and a corresponding fixed limit stop (2H-2J) which is provided inside said  
20 housing and on which the hooked bracket of the corresponding slide engages when said slide arrives at the rearward position.

8. The device as claimed in claim 1, wherein said  
25 mechanism for triggering said sampling comprises, on said housing, a front tumbler (8) and a rear tumbler (9) which can be actuated independently of one another and act on said blocking means.

30 9. The device as claimed in claim 8, wherein said front and rear tumblers are connected mechanically to one another by a connection rod (24) situated inside said housing.

35 10. The device as claimed in claim 8, wherein said rear tumbler (9) comprises a pushbutton (9A) with return spring (9B) and equipped with a bracket (9C) arranged projecting into said housing in order to free said blocking means (11B, 11C) of

- 5       said slide with needle, and wherein said slide  
      (11) with needle is equipped with an unblocking  
      bracket (11D) arranged projecting in order to act  
      on said blocking means (12B, 12C, 2H) of said  
10       slide (12) with cannula, following its  
      displacement to the forward position.
11.   The device as claimed in claim 8, wherein said  
10       front tumbler (8) comprises a lever (8A) pivoting  
      about an axis (2K) of said housing orthogonal to  
      its longitudinal axis, said connection rod (24)  
      connecting said lever of the front tumbler to said  
      pushbutton of the rear tumbler.
- 15   12.   The device as claimed in claim 8, wherein it  
      comprises a safety means for rendering said  
      trigger mechanism (8, 9) inoperative, said safety  
      means consisting of a notch (2L) which is formed  
20       in said housing and in which said front tumbler  
      (8) can be received following a transverse  
      displacement.
13.   The device as claimed in claim 1, wherein said  
25       housing is made up of two half-shells joined  
      together along the longitudinal plane.